Progress in the biology of psychiatry

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The name of the *Journal of Psychiatry & Neuroscience* is an appropriate one, for it signifies the direction of the discipline of psychiatry in the future. The intellectual and clinical aspects of psychiatry should be and will be dominated by the integration of basic neuroscience and the psychological and social sciences to achieve an understanding of clinical phenomena and the approach to their treatments.

Over the last 100 years, psychiatry has gone through numerous stages in its evolution. During the first half of the 20th century, mental illness was seen purely in a psychosocial context and biological phenomena were relegated to a minor role. Most major theorists were not ready to concede that psychiatric disorders resided in disorders of brain function, and most clinical syndromes were thought to have an etiology in abnormal early development and altered interpersonal relationships. The introduction of chlorpromazine, and later imipramine, in the mid-1950s led to the phase of biological psychiatry that dominated academic discourse in psychiatry for the next 30–40 years. Biological theories of psychiatric illness predominated, and psychosocial factors were relegated to a minor role, largely overwhelmed by biological reductionism. Though it was broadly accepted that psychiatric illness resided in the brain, a vast literature comprising studies of the biology of psychiatric disorders, carried out largely on clinical populations, yielded very limited or specific data on the exact etiology of psychiatric illness or the mechanism of action of psychotropic agents. Although the phase of biological psychiatry substantially advanced the field and clearly established the predominance of the brain in psychiatric disorders, its development appeared to be separate and distinct from the explosion of new data in basic neuroscience and the substantial developments in related fields, such as neuropsychology and the other psychological and social sciences.

Over the last 10–15 years, there has been another important change. The study of psychiatric disorders is now fully based in the basic neurosciences, and biological psychiatry is now synonymous with the study of basic neurobiological phenomena and their relation to illness and treatment response. Moreover, basic neuroscience phenomena are also studied, at least as they apply to psychiatric illness, in the context of social learning, developmental stage and culture. The brain is the transducer of many environmental phenomena, including stress, and stress and other stimuli mediated by the brain affect a wide variety of organs, including the brain itself. Therefore, the brain is not only the transducer but also the effector of stress, one consequence of which may be increased vulnerability to psychiatric illness. Integration of the understanding of environmental events and their impact on biology, particularly brain biology, involves studies at the most basic level. Progress in this area will ultimately unlock the secrets of the biology of major psychiatric illness and the mechanism of action of the drugs that are effective in treating them.

The *Journal of Psychiatry & Neuroscience* is an increasingly important forum for such studies. The articles in

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this issue, ranging from clinical to basic studies, exemplify this. In many instances, they examine the relationship between basic biochemical mechanisms and clinical phenomena.

The progress in psychiatric research over the last 100 years has been remarkable, and although there is still very little known about the illnesses we confront and treat, there is reason for optimism. A truly integrative neuroscience, comprising the study of brain function in the context of the person and the environment in which they live will ultimately produce knowledge important to an understanding of a broad range of psychiatric illnesses — illnesses that cause so much dysfunction and suffering in the patients we treat.

2001 Canadian College of Neuropsychopharmacology Annual Meeting Announcement

The 24th Annual Meeting of the Canadian College of Neuropsychopharmacology (CCNP) will be held June 16–20, 2001, at the Banff Centre for the Arts in Banff, Alta., in the Canadian Rockies. This meeting will be held jointly with the British Association for Psychopharmacology and the Japanese Society for Neuropsychopharmacology. Symposia, plenary lectures and award lectures will be included.

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